

U S WEST, Inc.
Suite 700
1020 Nineteenth Street, NW
Washington, DC 20036
202 429-3136
FAX 202 296-5157

00-~~318~~36

USWEST

Kenneth T. Cartmell
Executive Director - Federal Regulatory

March 27, 2000

Mr. Dale Hatfield
Chief, Office of Engineering and Technology
Federal Communications Commission
445 12th Street, SW, Room 7-C155
Washington, DC 20554

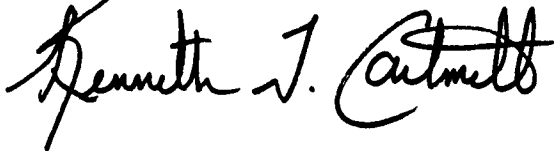
RE: CFR 46, Section 63.100
Final Service Disruption Report, Denver, CO
DNVRCODCDS0

Dear Mr. Hatfield:

On February 26, 2000, U S WEST Communications (USWC) experienced a Service outage in Denver, Colorado. In accordance with the reporting rules, enclosed is USWC's Final Service Disruption Report for this outage.

Please contact me if you have questions concerning this report.

Sincerely,



Attachments

cc: Mr. Robert Kimball
Mr. Stagg Newman

Final Service Disruption Report

Reporting Company: U S WEST

Location of Disruption: Denver, CO CNVRCODCDS0

1. Date and Time of Incident:

February 26, 2000 at 0520 MST.

2. Geographic Area Affected:

The Dry Creek area of Denver, CO was affected.

3. Estimated Number of Customers Affected:

Approximately 81,200 U S WEST customers were affected by the outage.

4A. Types of Services Affected:

InterLATA, IntraLATA-Interoffice, and toll services were affected.

4B. 911 Service Affected:

911 Service was not affected.

5. Duration of Outage:

Service was restored at 0554 MST for a total duration of 34 minutes.

6. Estimated Number of Blocked Calls:

There were approximately 1,800 blocked calls.

7A. Root Cause of the Incident:

The root cause of the incident was the absence of a software feature in the switch. Lucent software failed to enable this feature. The failure occurred during a scheduled retrofit operation.

7B. Name and Type of Equipment:

Lucent Technologies 5 ESS

7C. Specific Part of Network Affected:

Central Office Signaling.

8. Method(s) Used to Restore Service:

The software feature, which was not enabled in the configuration of the switch, caused an SS7 isolation during the retrofit process; however, the automatic completion of the retrofit process restored all service.

9. Steps Taken to Prevent Recurrence of Outage:

The following steps have been or will be taken to prevent recurrence of the outage:

U S WEST is currently performing 5E14 retro fits on all Lucent Technologies 5ESSs. During these processes, several Central Offices have experienced longer than normal SS7 isolations.

- ◆ U S WEST had been working with Lucent to identify the source of the problem, but the problem had not been determined.
- ◆ Bell Atlantic had experienced the same problem and found the cause to be unimplemented software, Transparent Feature I.D. 694. This feature deals specifically with minimizing the outage times for SS7 A Links during the retrofit process.
- ◆ U S WEST has enabled this software in every 5ESS in the network and is working with Lucent to ensure that all office tapes sent by Lucent will reflect the enabling of the feature.
- ◆ U S WEST has requested that Lucent provide a current and accurate list of additional features that may need to be enabled to enhance performance of all 5ESSs in the network.
- ◆ The Lucent SUMS Center, with responsibility for retrofit activity has agreed to monitor the progress of future generic retrofits to ensure minimal down time.

10A. Applicable Best Practice(s):

U S WEST reviewed Network Reliability: A Report to the Nation, June 1993 and evaluated all recommendations and best practices by focus area. Based on the root cause analysis, the most appropriate focus areas are:

Section B - Signaling Network Systems
Reference 6.1.1 - Root Cause Analysis

Section C Software and Switching System Reliability
Reference 5.1.3 MOP for all hardware and generic software growth and change activities
Reference 5.3.1 Hardware/Software Outage and Cause Analysis

10B. Best Practice(s) Used:

Section B - Signaling Network Systems

Reference 6.1.1 - Root Cause Analysis

Section C Software and Switching System Reliability

Reference 5.1.3 MOP for all hardware and generic software growth and change activities

Reference 5.3.1 Hardware/Software Outage and Cause Analysis

10C. Analysis of Effectiveness of Best Practice(s):

Section B - Signaling Network Systems

Reference 6.1.1 - Root Cause Analysis

This recommendation is specific to Signaling Networks; however, U S WEST currently requires a root cause analysis on all significant network failures.

Section C Software and Switching System Reliability

Reference 5.1.3 MOP for all hardware and generic software growth and change activities

This practice requires the preparation of a written Method of Procedure (MOP) for all hardware and generic software growth and change activities. U S WEST requires such MOPs. In this event, the MOP did not address the software action required.

Reference 5.3.1 Hardware/Software Outage and Cause Analysis

This practice recommends cause analysis for hardware/software failures. U S WEST fully supports this practice. U S WEST has a formal root cause analysis process that investigates the cause of the outage and recommends corrective action. In addition, U S WEST has processes in place to analyze hardware/software failures and work with equipment suppliers, as necessary. U S WEST also requires suppliers to provide root cause analysis reports for events where the supplier participates in the analysis and resolution processes.

Kenneth Cartmell, Executive Director – Federal Regulatory
U S WEST
1020 19th Street, NW, Suite 700
Washington, D.C. 20036
Telephone (202) 429-3136

00-036

USWEST

*Federal Relations Office
1020 19th Street, NW
Suite 700
Washington, DC 20036*

FACSIMILE TRANSMITTAL LETTER

DATE: March 15, 2000

Number of Pages (including cover sheet) 2TO: **Bob Kimball** Facsimile Number: **202-418-1918**

FROM: **Kenneth T. Cartmell**
Executive Director, Federal Regulatory Affairs
Office Telephone Number (202) 429-3136
Facsimile Phone Number (202)296-5157

Message: Bob:

Attached is a copy of the Initial Report associated with a US WEST outage that occurred on February 26, 2000. US WEST did not file this Initial Report with the Monitoring Watch Officer until today. This report is being filed late, because the event was not deemed to be an outage by the inexperienced Technician that provided the "routine" scheduled maintenance that had the affect of isolating customers from toll services for 33 minutes. This incident was just discovered as part of an ongoing internal audit process. In light of the fact that this report is late, I am faxing a copy of the report to you as well as to the Monitoring Watch Officer. Please call with questions, and please let me know if there are additional actions that US WEST should take in order to rectify this situation. Thank you for your assistance!!

Please note: The information contained in this facsimile message may be confidential and/or legally privileged information intended only for the use of the individual(s) or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any copying, dissemination or distribution of confidential or privileged information is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone and we will arrange the return of the facsimile. Thank you!!!

Please contact Doree Cordoviz at (202) 429-3137 if there are any problems with this transmission. Thank you!!!

00-036

FCC INITIAL REPORT
U S WEST - Large Scale Abnormal Condition Report (LSACR)
Service Disruption Report

☒ 120 MINUTE REPORT ☐ 3 DAY REPORT

ACR #: CO.000315.015Date Of Incident: 2/26/00 Time Of Incident: 05:21:34 MSTGeographic Area Directly Affected: Denver Dry Creek, Colorado
(Cities, LATA(s), States(s))CLLI code(s) for affected area: DNRRCODCDSEstimated Number of Customers Affected: 89,585
(i.e. Access lines in the switch, LATA(s) or States(s))Types of Services Affected (e.g. Local, Toll, 800, 911, FAA, etc.): TollDuration of Outage (Hours & Minutes): 33 minutesEstimated Number of Blocked Calls: unknownApparent Cause of Incident: Scheduled switch generic retrofit caused SS7 isolationMethod Used to Restore Service: Completed retrofit processSteps Taken to Prevent Recurrence: Corrected retrofit process

CONTACT PERSON: Kenneth Cartmell-Exec. Dir-Fed Regulatory Ph: 202-429-3136
U S WEST
1020 19th Street NW Suite 700, Washington, D. C. 20036

Tim Mason
 Vice President - NROC
 Ph: (303) 707-5100
U S WEST
700 W. Mineral, Littleton, CO 80120

-or-
 Dave Rygh
 Director - Network Management Center
 Ph: 303-707-5608
U S WEST
700 W. Mineral, Littleton, CO 80120

Date Reported to FCC: 3/15/00Person Faxing Report: Jane QuigleyTelephone Number: 303-707-8084Time Reported to FCC: 15:04 MST
(Include AM/PM, Time Zone)Time Confirmed with FCC: 15:05 MSTFCC Contact Name: Agent Brought

PRI FAX: Monitoring Watch Officer (202) 418-2812-Confirm at (202) 632-6975
Secondary FAX: Monitoring Watch Officer (301) 725-2521 - Confirm at (301) 725-2278

(To be used only at the direction of the Primary Fax Monitoring Watch Officer)
Also FAX to: U S WEST Federal Relations Office at (202) 296-5157

Also FAX to: Karen Eccli/Jane Quigley (303) 707-2229

Also FAX to: Glenda Weibel (206) 345-2129

Also FAX to: Bev Sharpe (303) 694-1719

Initial report filed late, because the event was discovered as a part of ongoing internal audit process.